

```
RESULT 7
   AAV63730
        AAV63730 standard; DNA; 9299 BP.
   XX
   AC
         AAV63730:
   XX
   DΤ
         12-AFR-1999 (first entry)
   XX
         Vector plasmid PerGUS16.
   DΕ
   XX
        Peroxidase; per5 gene; maize; corn; transgenic plant; promoter; root;
   XW
         vector; plasmid PerGUS16; beta-glucuronidase; uidA; reporter gene; ds;
   KW
   KW
         circular; cyclic.
  xx
  OS.
        Escherichia coli.
  os
        Zea mays.
  OS
        Agrobacterium tumefaciens.
  os
        Synthetic.
  QS
        Chimeric.
  XX
  FH
        Key
                             Location/Qualifiers
  FT
        promoter
                             48. .4247
  FT
                             /*tag⊶ a
  FT
                             /note- "perS promoter and untranslated leader"
                            4248. .4263
/*tag- b
/note= "per5 exon 1"
  ĽΤ
        exon
  FT
  FТ
                            4264. .6068
/*tag= c
  FΤ
        CDS
  FΤ
                            /product- "beta-glucuronidase"
/note= "Escherichia coli uida reporter gene"
  ГT
  FΤ
  FT
        3'UTR
                            6069. 6111
                            /*tag= d
/note= "3' untranslated region from pBI221"
  FT
       אַדטיצ.
                            6122. .6396
 FŤ
                            /*tag= e
/note= "nos 3'UTR"
 FТ
       misc feature
                            6397. .6407
 FŢ
                            /*tag=
 FT
                            /note= "linker"
 FT
       misc_feature
                            6408. .9299
 FŢ
                            /*tag=
 FT
                            /noté= "Bluescript II SK-"
 XX
 PN
       WO9856921-A1.
 ХX
 PD
       17-DEC-1998.
 хх
 PF
       10-JUN-1998;
                          98WO-US011921.
 XX
 PR
       12-JUN-1997:
                          97US-0049752P.
 XX
 ₽A
       (DOWC ) DOW AGROSCIENCES LLC.
 XX
 ΡI
       Ainley M, Armstrong K, Belmar S, Folkerts O, Hopkins N, Menke MA; Pareddy D, Petolino JF, Smith K, Woosley \lambda;
 PΙ
 XX
 DR
      WPI; 1999-080904/07.
 ХX
 PT
       New isolated regulatory sequences for transgenic plants - which are
PΤ
       derived from the maize root preferential cationic peroxidase protein
       (per5) gene.
\mathbf{x}\mathbf{x}
PS
      Example 11; Page 108-112; 150pp; English.
ХX
ÇÇ
      This is the nucleotide sequence of PerGUS, a plasmid containing 4 kb of
      the maize root preferential cationic peroxidase per5 gene comprising the
ÇÇ
      per5 promotor, untranslated loader, and the first 5 codons of the coding region (i.e. nucleotides 1-4200 of the sequence given in AAV63717), as well as the GUS gene, and the nos 3' untranslated region (3'UTR). It does not include an intron in the untranslated region. The invention relates
CC
CC
CÇ
CÇ
      to new isolated regulatory sequences, especially promoter, intron and 3'UTR sequences, of the maize per5 gene. Claimed recombinant gene
CC
CC
ĊС
      cassettes comprising per5 regulatory sequences are used to control
      expression of recombinant genes in selected tissue, especially the root,
CC
CC
      of transformed plants, particularly maize
ХX
SQ
      Sequence 9299 BF; 2573 A; 2114 C; 2158 G; 2453 T; 0 U; 1 Other;
  Query Match
                                25.4%; Score 209.2; DB 2; Length 9299;
```

```
Best Local Similarity 90.1%; Pred. No. 4.8e-56;
    Matches 236; Conservative
                               0; Mismatches
                                               23; Indels
                                                              3; Gaps
             Z TGCACGGTACTCCAAGTATAAGACACAGCTAAAACACAACATAATG---CAGTGGTCATG 58
  Qy
               1111111111
          1402 TGCACAGTACTCCAAGTATAAGACACAACTAAAACACAACATAATAATACAGTGGTTATA 1461
  Db
  Qу
            59 TCTAAAACATGTGTCTTACCATATTCATTGTATCAATCAGAACATTCAATAAATTAAAGT 118
               1462 TCTAAAACATGTGTCTTACCATATTCATTGTACCAATTAGAACATTTAATAAATTAAAGT 1521
  DЪ
  ٥у
           119 GACCAATCAGATAGTCTCCTGTCCCGAATATAGAGCTAAGACACTGTGTCTTCGTCAAGA 178
               висны и поск от поприсы запатим
          1522 GACCAATCAGCTAGCCTCCTGTCTCGAACATAGAGCTAAGACATTGTGTCTTCGTCAAGA 1581
  Db
           179 TACATGTCTTGAGATTTTTTACATTCACCCCCCTAGACACACTCTAAGACACAACTTAAG 238
  Qy
          ĽЬ
 Óλ
           239 ACACCEATTGTACATGCCCTAA 260
              Db
          1642 ACACCCATTGTACATGCTCTTA 1663
 RESULT B
 AAV63751
     AAV63731 Standard; DNA; 9408 BP.
 ХX
 AC
      AAV63731;
 DT
     12-APR-1999 (first entry)
 ХX
 CE
     Vector plasmid PERGUSPER3.
 XX
 KW
     Peroxidase; per5 gene; maize; corn; transgenic plant; promoter; root;
     vector; plasmid PERGUSPER3; beta-glucuronidase; uidA; reporter gene; ds;
 KW
 KW
     circular; cyclic.
 XX
 os
     Escherichia coli.
 OS.
     Zea mays.
 OS
     Agrobacterium tumefaciens.
 OS
     Synthetic.
 OS
     Chimeric.
 XX
 FH
                    Location/Qualifiers
 FT
     misc_feature
                    1. .42
 FŢ
                    /*tag= a
                    /note- "polylinker site" 43. .53
FT
     misc feature
                    /*tag= b
/note= "synthetic linker"
FΙ
     promoter
                    54. .4253
FI
                    /*tag= c
FT
                    /note= "per5 promoter and untranslated loader"
FТ
     GXOD
                    4254. .4269
FT
                    /*tag=
FT
                    /note= "per5 exon 1"
FΤ
     CDS
                    4266. .6074
FT
                    /*tag= e
FT
                    /product= "beta-glucuronidase"
FT
                    /note= "Escherichia coli widA reporter gene"
FT
     3'UTR
                    6075. .7117
FΤ
                    /*tag= £
FT
                    /note= "3" untranslated region from p31221"
FΤ
     3'UTR
                   6140. .6510
FT
                   /*tag= g
/note= "per5 3'UTR"
FT
FT
    misc feature
                   6517. .8408
FT
                   /*tag= h
FΤ
                   /note- "Bluescript II SK-"
XX
PN
    W09856921-A1.
XX
ΡD
    17-DEC-1998.
XX
    10-JUN-1998:
                  98WO-US011921.
PR
    12-JUN-1997:
                  97US-0049752P.
ХX
    (DOWC ) DOW AGROSCIENCES LLC.
```